

REPORT

OF THE

ASPECTS OF THE DRINK QUESTION.

SUBMITTED TO THE CONFERENCE OF FRIDAY, MAY 12, 1893.

A scientific and exhaustive inquiry into the Effects of Alcoholic Drinks upon the Human Body would include the following points:—

- 1. The effects of each usual, or, as it might be termed, normal constituent of the various kinds of alcoholic drinks, including more especially malt liquors, the wines in ordinary use, whiskeys, brandy, rum, gin, and liquors or cordials.
- 2. The effect of certain unusual and abnormal substances which are at times found in alcoholic drinks, and which may be either purposely added or be accidental contaminations.
- 3. The effect of the various combinations of these normal and abnormal constituents which form the alcoholic drinks of commerce.
- 4. The constituents referred to are ordinary or ethyl alcohol, various higher alcohols such as amyl, propyl, butyl, etc., alcohol and their derivative ethers, extractive, bitter, aromatic, and coloring matters, volatile oils, tannin, salicylic acid, and other preservatives, etc.
- 5. The effects to be observed may be divided into immediate, secondary, and remote. The immediate and secondary effects, such as those on body temperature, digestion, absorption, secretion, the vascular and nervous systems, and especially metabolism or nutrition in general, are to be ascertained by experiments on animals and on man. By secondary effects are meant those which follow within a day or two. This investigation would chiefly be a matter for skilled experimental physiologists to undertake.
- 6. The remote effects are those due to the action for a considerable period of time of the substances in question, being the changes in tissues, organs, and func-

tions, together with the resultant influence on nutrition produced by a more or less habitual use of alcoholic drinks of various kinds. This branch of the inquiry pertains more especially to pathology, and requires a careful collection and comparison of records by competent observers. Experiment on this part of the question has but a limited field of usefulness, although the results bearing on nutrition may be of direct value.

- 7. It is known in a general way that the results of the habitual use of different kinds of alcoholic drinks differ in different individuals, and also according to the form of drink used. Thus physicians commonly believe that the habitual use of malt liquors tends to produce fatty degenerations of various organs, more especially of the liver and kidneys; that the habitual use of wine, more especially of burgundy, the finer clarets, and of port, tends to produce gout; that the use of distilled liquors tends to produce excessive development of the inter-cellular tissue in the liver and kidneys, resulting in what is called cirrhosis; and that the use of the cheaper kinds of spirits, and especially of those containing the higher alcohols in the form of fusel oil, is especially likely to produce delirium tremens. At present, however, such statements as these are usually matters of individual opinion and do not rest upon any scientific statistical basis. One of the lines of inquiry would be to obtain positive data on these points, to compare the results observed in beer drinkers, for example, with those observed in spirit drinkers.
- 8. Another branch of the inquiry into remote effects relates to the influence upon offspring of the habitual use of alcohol, or of its excessive use just prior to fecundation and during pregnancy. Upon these points we have little definite and accurate information. Connected with this is the question of hereditary predisposition to alcoholism, and that of periodical alcoholism or so-called dipsomania, in which the desire for alcoholic drinks is considered to be due to abnormal nerve structure and to be, therefore, a symptom of a particular form of disease.
- 9. In each of these lines of inquiry, the first step should be to prepare a concise statement of what is known, carefully distinguishing facts reported by reliable experimenters and observers, and paying little attention to speculations and theories, except for the purpose of formulating definite questions with an indication of the possible sources from which positive answers may be derived. This part of the work can probably be best done in the Library of the Surgeon-General's Office in Washington, and it would occupy the time of a skilled man for several months.

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